

ON SOME GENERA AND SPECIES.

BY D. G. ELLIOT, F. R. S. E.

IN MY little book on the 'Wild Fowl,' I gave some reasons why, in my opinion, the genus *Olor* of Wagler, Isis, 1832, p. 1234, should not be employed in preference to *Cygnus* Bechstein, Orn. Taschenb., Vol. II, p. 404 (1803). In order to bring this question to the attention of the Committee of Nomenclature, some of whose members probably have not read what I have written, I propose to consider *Olor* as diagnosed by Wagler, and afterwards by Stejneger (Proc. U. S. Nat. Mus., 1882, p. 174), and show what seems to me, the entire insufficiency of the generic values of the characters advanced by these writers, and also that they are by no means in accord as to which of these should be selected to represent the genus.

Wagler divided the Swans into three genera, *Cygnus*, *Olor* and *Chenopsis*. With the last, containing the Black Swan, I have at present nothing to do. *Cygnus* is diagnosed as follows: "Aeusere Merkmale dieser Sippe bestechen in dem Höcker von der Stirn und in dem Daseyn der Nagelkuppe am Oberkiefer." In this genus he placed the Mute Swan, *Cygnus gibbus* Bechst. = *C. olor* Gmel. By the above it will be seen that the characters relied upon as generic are the knob at the base of the bill, and the nail on the tip. *Olor* contains the rest of the White Swans, omitting only *columbianus* Ord. The diagnosis for this is as follows; "Der Oberkiefer, ohne Nagelhuppe; die Stirn ohne Höcker:" Thus the presence or absence of the knob and nail on the bill are the only characters. In some remarks after the species he makes certain comparisons of the anatomy, such as the windpipe, muscles of the crop (Magen), etc., but the characters for the genera are as quoted above.

Stejneger (l. c.) has quite another diagnosis, and not only rejects all the characters relied upon by Wagler, but actually employs as a specific character the chief one, the knob (Höcker) given by Wagler to distinguish his two genera.

For facility of comparison I here give Stejneger's definition of

Cygnus and *Olor* in parallel columns, and it will be seen how hard pushed he was to find any lines of separation between them.

OLOR.

Predominant color of the adults white.

Young with downy or feathered lores, the down on the sides of the bill terminating far back of the nostrils, and forming very distinct loreal antiæ.

Tertials and scapulars normal, not crisp.

Tail longer than the middle toe with claw, rounded.

Inner webs of outer three primaries and outer webs of the second, third, and fourth sinuated. Webs of the feet not scalloped.

CYGNUS.

Predominant color of the adults white.

Young with downy or feathered lores, the down on the sides of the bill terminating far back of the nostrils, and not forming distinct loreal antiæ.

Tertials and scapulars normal, not crisp.

Tail longer than the middle toe with claw, cuneate.

Inner webs of outer three primaries and outer webs of second, third, and fourth sinuated. Webs of the feet straight, not scalloped.

The mountain has indeed labored and brought forth a mouse. Did any one ever before see so little produced from so much? The above diagnoses are absolutely identical save in two particulars, neither of which can be deemed as presenting *generic* characters at all, or if they should be so mercifully regarded by some compassionate writer, it could be at best only to permit them to create a very doubtful status as subgenera. It will be observed that the only characters given by Wagler, the knob and nail on the bill, and upon which he relied to establish *his* genera, are by Stejneger entirely ignored, for the reason that will be shown later on, and two others set up in their places. And what are these, and where does he look for the chief one? In the adult, or even in the immature bird? No, but in the downy young. When the newly hatched bird is devoid of feathers he finds a *generic* character upon the outlines of the down that in a few days will disappear and never be seen again throughout the bird's existence! This character (?) I have stated in the 'Wild Fowl,' to be "an adolescent, evanescent, and unreliable distinction, one not possessed by the adults, and which if recognized would place the young in one genus, the adults in another." It is difficult to

imagine that any one would dream of offering diagnoses like those given above for establishing genera, unless he was imbued with a determination to carry out his purpose at all hazards. Wagler's characters were far better, but they have been rejected by ornithologists as unworthy of being considered generic for over fifty years, and this fact may have induced Mr. Stejneger to look for others. But his genera are not those as defined by Wagler, the only similitude being that Stejneger has kept the same species together. Wagler's characters were taken from adult birds, where generic distinctions if they exist are permanent, and remain as long as the bird lives, and not from that incipient stage of adolescent plumage that a few fleeting hours causes to disappear. As well found a genus (and indeed with more reason) for the young of the Spoonbill with its narrow pointed bill, and another for the adult with its spatulate maxilla, for here is a wide difference, but the first is only a temporary condition, like the down on the cygnets, the latter a permanent character.

I have said that Stejneger rejected Wagler's first named character, the 'knob,' for a reason, and this appears in the key of the species of *Cygnus* (p. 189), where it is employed in a specific sense as indicating the divisions in which he separates what he gives as the distinct species of that genus, but it is nowhere employed in his paper as a generic character, as Wagler gave it. Thus, in the synopsis of the species, Stejneger divides them as "a¹, culmen with a knob at the base; a², culmen without a knob," this last, by the way, being Wagler's chief character for *Olor*.

As to the rounded or cuneate tails as *lone* characters, the other being of no value, it is hardly necessary to discuss them as of sufficient importance to establish a genus. It will thus be seen that Wagler's genus *Olor*, founded upon characters that were merely non-existent when compared with those he gave for *Cygnus*, having been rejected by all ornithologists for more than fifty years, can hardly with reason be resurrected for such insufficient and unreliable reasons as those advanced by Stejneger; and the fact remains, and many ornithologists have always been convinced of it, that there does not exist any character that can properly be termed generic, to separate the known species of

White Swans. It is, therefore, to be hoped that the Committee, after due consideration of the above presentation of the case, may decide to relegate *Olor* to its true position of a synonym, and reinstate *Cygnus* as the proper genus for our Swans.

The genus EXANTHEMOPS, instituted by me in 1868 for *Anser rossi* Cassin, has, according to the report in the last number of 'The Auk,' been accepted by the Committee on Nomenclature as a subgenus. The reasons which influenced this decision are not given, yet it would be interesting to learn what they were. Ross's Goose is a rare bird, comparatively speaking, and few collections, even those of great museums, possess more than two or three examples, and opinions founded upon such scant material are very apt to be misleading if characters fully developed are only to be best appreciated in the adult. Those on which I relied when founding the genus were the following: the wart-like excrescences, which increase in size and number as the bird advances in years, until they completely cover the base of the bill, and extend nearly to the nostril; the absence of gap at the commissure, so conspicuous a feature in the bills of all other Snow Geese, no black space visible, also a clearly discernible feature in the species of *Chen*, and hardly any beveling present and consequent absence of the grinning expression, so remarkable a feature in its allies. Now it seems to me that these are structural features not found in any other species of Goose, and entitle their possessor to a distinct generic rank. If one takes the excrescences on the bill as the sole character as to what constitutes the genus and forms his opinion solely upon dried skins, he is very apt to reject it as unfounded, because these peculiar 'warts' dry up to a great extent, indeed in some cases almost disappear after death and leave but little evidence of their previous size or of the extent of bill they covered. Hearne, who was the first observer to record the appearance of this bird in life, says the bill "at the base is studded round with little knobs about the *size of peas, but more remarkably so in the male.*" *Voy. North. Ocean*, p. 442 (1795). This is a character similar to those on which the genera *Flectropterus Cairina*, *Sarcidiornis* and others are established and accepted. Dried skins do not exhibit differences that are mainly

fleshy, as they appear in life, and one is apt to go astray when an opinion is formed upon them as to their generic value, for they are much less pronounced than they are when the animal is alive. These caruncles, unknown in any other Goose, and the structure of the bill very unlike that of other species in the subfamily, are, I maintain, sufficiently divergent structural characters to establish a distinct genus.

In the 'Shore Birds,' I gave the name that should be employed for the Western Willet as *Symphemia s. speculifera* Pucheran, arriving at this conclusion by an independent investigation, having forgotten Dr. Allen's very clear and conclusive evidence on this subject published seven years previously (Auk, 1888, p. 423). Had I remembered this, it would have saved me considerable work. This matter, so far as outsiders are aware, has never been acted upon by the Committee; at least, there has been no verdict announced, and as the Check-List is now in a fair way of being presented in a correct and proper shape, even a matter of this kind should not be permitted to slumber longer. In an article published in the Rev. et Mag. de Zool., 2nd Series, 1851, p. 369, entitled 'Études sur les types peu connus du Musée de Paris,' Dr. Pucheran describes as *Totanus speculiferus* the bird mentioned by Cuvier, Règne Anim., 2d edit., Vol. I, p. 534, in a note, as follows: "Ajoutez au chevaliers ordinaires, *Tot. speculiferus*, assez semblable au *semipalmatus*, mais plus haut sur jambes, à bec plus long et à pieds ordinaires." Pucheran gives a detailed description of this specimen, which is not necessary to reproduce here, merely stating that it portrays Mr. Brewster's *inornata* in winter. He sums up the matter as follows: "Cette espèce se distingue, par la longueur de son bec, du *Totanus semipalmatus*, Tem. Les dimensions du seul individu que possède la Musée de Paris sont les suivantes: Longueur du bout du bec à l'extrémité de la queue (prise directement, le bec étant fortement tourné à droite), 33 cent.—*Id.* de la queue (mesurée en dessous), 8 cent.—*Id.* du tarse, 75 millim.—*Id.* du doigt médium (l'ongle y compris), 41 millim.—*Id.* du bec (en suivant la courbure), 66 millim.

In the opinion of several ornithologists, this bird is the same as Mr. Brewster's subspecies, and that our Check-List is wrong in containing the name of *inornata*. Fortunately, as the type

described by Pucheran is in the Museum of Paris, it is a very easy matter to send some winter examples of the Western Willet to Dr. Oustalet and have a comparison made and the question settled beyond a doubt. I suggest to the Committee that this be done.

In the same number of 'The Auk' the name for our Northern Turkey has been correctly given as *M. fera* Vieill., *Nouv. Dict.*, 1817, p. 447, and not *M. sylvestris* Vieill. as given by me in 'Game Birds.' It may be interesting to state how I came to adopt that name, as Vieillot never described any Turkey as *sylvestris*. In the MS. of the book just mentioned, I had originally placed our northern bird under the name of *gallopavo* Linn., and it was only as the copy was being put in type that, acquiescing in the views of some of my colleagues, although fully convinced that their case was not proven, any more than my view could be proved, I adopted *gallopavo* for the Mexican bird. It was then necessary to ascertain what name Vieillot had given the northern bird. There was no copy of the 'Nouv. Dict.' available, and I could not delay the printer until I should be able to consult it, so perforce, contrary to my established custom in such cases, I accepted the citation given in *B. M. Cat. Birds*, XXII, p. 389, as correct, and was thus led astray.

As to the names adopted by the Committee, I regret that I cannot accept them. There is no evidence that I am aware of, that conclusively proves that *fera* and *gallopavo* as now understood, intergrade, and until that is ascertained to be a fact I prefer to consider them as distinct species, with *osceola* a subspecies of *fera*. With regard to *intermedia (elliotti)* of my book (l. cit.), the more I investigate that bird the more I am convinced that it should be accorded specific rank. Beside the different coloring of the male, that of the female agrees with or resembles none of the females of any other known Turkey. Like many other species of birds (it would be easy to give examples) the main and important specific differences are to be found in the female, and if the male was exactly like *fera*, these characters would be sufficient for separation. The gray tips to the feathers of the upper surface making almost continuous bars across the body, and the buff ones performing a similar service on the

under parts is a quite unique character. I would therefore designate the Turkeys as follows:

Meleagris fera. Northern Turkey. Pennsylvania to Florida, west to Wisconsin and Texas.

Meleagris fera osceola. Florida.

Meleagris intermedia. Southern Texas; Eastern Mexico below 2000 feet.

Meleagris gallopavo. Western Texas to Arizona. Tablelands of Mexico.

Under these names the Turkeys will appear in the third edition of 'Game Birds.'

SOME PARASITES OF BIRDS.

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ALL collectors of birds have noticed, and some have been made uncomfortable by, certain small flat, wingless, quickly-running insects which infest, in varying degree of abundance, the outside of birds' bodies. These insects are known as Mallophaga and are of such peculiar and unusual structural condition, differing so markedly from any other insects, that they have been constituted an independent order of insects, although in number of species they are insignificant compared with the better known insectan orders.

Yet small as is the group, the number of known species in it, a thousand, approximately, may seem surprisingly large to those unacquainted with the systematic exploitation of the order.

The Mallophaga are external, wingless parasites of birds and mammals which feed exclusively on the feathers, hairs and dermal scales of their hosts. They are not lice, if by lice be meant those better known Hemipterous parasites which with piercing beak thrust into the flesh of the host, suck its blood. The Mallophaga have mouth parts fitted for biting and chewing, with